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10/802,321	03/17/2004	Stefan Bengt Edlund	IBM-014	3735

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EXAMINER
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ART UNIT	PAPER NUMBER
2167	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/802,321	EDLUND ET AL.
Office Action Summary	Examiner	Art Unit	
	ROBERT TIMBLIN	2167	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>6/26/2008</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-20</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-20</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

This Office Action corresponds to application 10/802,321. Claims 1-20 are currently pending.

Response to Amendment

In the present amendment (dated 6/26/2008) Applicant therein cancels claims 26 and 27. No further amendments have been made.

35 U.S.C. 101 Rejections

The 35 U.S.C. 101 rejection given to claims 26 and 27 has been removed in light of their cancellation.

Specification

The objection to the specification is withdrawn in light of applicant's remarks submitted 6/26/2008 (see p. 6).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 16-20 are rejected under 35 U.S.C. 101 because they purport to nonstatutory subject matter. In particular, the computer usable medium defined in the claims is supported as a "computer data signal embodied in a carrier wave" (para 0007)

which is not patentable. Therefore, by the medium being directed towards a non-statutory medium, the claims are rejected under 35 U.S.C. 101. See MPEP 2106.01 in relation to claiming statutory subject matter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7, 9, 11-20, 26-27 rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Publication Number 2003/0172113 A1 issued to Brian A. Cameron et al ("Cameron") and US 2004/0230598 issued to Stephen Robertson et al ("Robertson") and US 7,092,977 B2 issued to Albert Leung et al ("Leung").

As per independent claim 1, Cameron teaches synchronizing a client having a client database with a server having a server database and transmitting documents (paragraph 7, lines 4-8, synchronizing documents between server and client);

Initiating a synchronization task at one of the client, ... and identifying the server and the server database fro synchronization (paragraph 12 and paragraph 42, as during synchronization server or small device (client) notifies the other of changes and update).

Cameron does not explicitly teach calculating for a plurality of times and a plurality of clients a document score for each of a plurality of documents in the server database

and documents which, the document score designating an importance of a respective one of the documents to a respective one of the clients at one of the times the document to the client and transmitting one of the documents in the server database to the client based on a respective document score for a latest time. Robertson does teach these limitations (paragraph 20, new documents which include documents newly received to the document filtering system and/or documents currently in the system which have been modified and paragraph 49 the new documents are scored) and (paragraph 49, lines 16-20 as profile score field which stores the score that indicates how well the terms in the document associated with the profile scoring file match the terms in the user profile and paragraph 20 lines 15-19, sending document to user) to deliver to a user, electronic documents that a user may find relevant. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Cameron with calculating a document score for each of a plurality of documents in the server database, the document score designating an importance of the document to the client and transmitting one of the documents) to deliver to a user, electronic documents that a user may find relevant as described by Robertson (paragraph 1, lines 14-15).

Cameron and Robertson do not explicitly teach the threshold value and comparison. Leung does teach this limitation (page 9 lines 25-30, storage capacity threshold) to provide efficient data access while optimizing storage resources. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Cameron and Robertson with the threshold value and comparison to provide

efficient data access while optimizing storage resources as described by Leung
(Abstract).

As per claim 2, same as claim arguments above and Robertson teaches:

wherein the transmitting comprises transmitting the one of the documents in the server
database to the client if the respective document score exceeds a threshold value
(paragraph 61, threshold value).

As per claim 3 same as claim arguments above and Leung teaches:

the threshold value based on a data storage capacity of the client. Leung does teach
this limitation (page 9 lines 25-30, storage capacity threshold).

As per claim 4 same as claim arguments above and Robertson teaches:

wherein the calculating a document score for one of the documents is determined from
at least one of a time of creation of the document, a number of times the document has
been read, a time of last access of the document, and an author of the document
(paragraph 20, terms(weighted) in document are compared to terms in user profile and
paragraph 49, score is stored in the profile score field which indicates how well the
terms in the document are associated with the terms in the user profile).

As per claim 5 same as claim arguments above and Robinson teaches:

wherein the calculating a document score is determined from a relationship between the respective document and another of the documents in the server database(paragraph 65, as retrieved set of previous relevant documents are stored in the user profile and used in determining document score).

As per claim 6 same as claim arguments above and Cameron teaches:

wherein the transmitting comprises transmitting one of the documents in the server database to the client ...if the one of the documents is not stored in the client database (paragraph 8, 10, server documents are downloaded to the client (small device)). Cameron does not explicitly teach a document score. Robertson does teach these limitations (paragraph 49, lines 16-20 as profile score field which stores the score that indicates how well the terms in the document associated with the profile scoring file match the terms in the user profile and paragraph 20, lines 15-19, sending document to user) to deliver to a user, electronic documents that a user may find relevant. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Cameron with a document to deliver to a user , electronic documents that a user may find relevant as described by Robertson (paragraph 1, lines 14-15).

As per claim 7 same as claim arguments above and Cameron teaches:

determining if the client database includes a newly created document and transmitting the newly created document to the server (paragraph 42, lines 1-5, synchronizing document additions).

As per claim 9 same as claim arguments above and Cameron teaches:

determining if the client database includes a modified document and transmitting the modified document to the server (paragraph 28, edited documents on client are transmitted to the server).

As per claim 11 same as claim arguments above and Robertson teaches:

wherein the client database includes a plurality of client documents, the method further comprising designating for deletion one of the client documents based on a document score of a complementary document in the server database (paragraph 12, deleting document from client).

As per claim 12 same as claim arguments above and Cameron teaches:

wherein the client database includes a plurality of client documents, the method further comprising removing one of the client documents from the client database... of a complementary document in the server database (paragraph 12, deleting document from client).

As per claim 13 same as claim arguments above and Cameron teaches:

further comprising resolving a conflict between the modified document in the client database and a modified document in the server database (paragraph 100, conflicting parts of documents are resolved).

As per claim 14 same as claim arguments above and Cameron teaches:

further comprising removing the designation for deletion based on a document score of the complementary document in the server database (paragraph 12, updating document).

As per claim 15 same as claim arguments above and Cameron teaches:

further comprising increasing a data storage capacity of the client by deleting the one of the client documents designated for deletion (paragraph 12, deleted documents increase the storage capacity).

As per independent claim 16 Cameron teaches:

A computer program product for use with a computer system having a server with a server database, the server database storing a plurality of documents accessible to a client(paragraph 7, lines 4-8, synchronizing documents between server and client);

program code for initiating a synchronization task at one of the client, and identifying the server and the server database fro synchronization (paragraph 12 and paragraph 42, as during synchronization server or small device (client) notifies the other of changes and update).

Cameron does not explicitly teach program code for calculating for a plurality of times and plurality of clients a document score for each of the documents, each document score designating an importance of a respective one of the documents to a respective one of the clients at one of the times; and program code for transmitting one of the documents in the server database to the client based on a respective document score. Robertson does teach these limitations (paragraph 20, new documents which include documents newly received to the document filtering system and/or documents currently in the system which have been modified and paragraph 49 the new documents are scored) and (paragraph 49, lines 16-20 as profile score field which stores the score that indicates how well the terms in the document associated with the profile scoring file match the terms in the user profile and paragraph 20, lines 15-19, sending document to user) to deliver to a user, electronic documents that a user may find relevant. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Cameron with program code for calculating a document score for each of the documents, the document score designating an importance of the document to a client and program code for transmitting one of the documents in the server database to the client based on a respective document score to deliver to a user, electronic documents that a user may find relevant as described by Robertson (paragraph 1, lines 14-15).

Cameron and Robertson do not explicitly teach the threshold value and comparison. Leung does teach this limitation (page 9 lines 25-30, storage capacity threshold) to provide efficient data access while optimizing storage resources. It would have been

obvious to a person of ordinary skill in the art at the time of the invention was made to

modify Cameron and Robertson with the threshold value and comparison to provide

efficient data access while optimizing storage resources as described by Leung

(Abstract).

As per claim 17 same as claim arguments above and Robertson teaches:

wherein the program code embodied in the computer useable medium further

comprises program code for determining a threshold value, the one of the documents in

the server database being transmitted to the client if the respective document score

exceeds the threshold value (paragraph 61, threshold value).

As per claim 18 same as claim arguments above and Leung teaches:

wherein the determination of the threshold value is based on a data storage capacity of

the client. Leung does teach this limitation (page 9 lines 25-30, storage capacity

threshold).

As per claim 19 same as claim arguments above and Robertson teaches:

wherein the calculating a document score for one of the documents is determined from

at least one of a time of creation of the document, a number of times the document has

been read, a time of last access of the document, and an author of the document

(paragraph 20, terms(weighted) in document are compared to terms in user profile and paragraph 49, score is stored in the profile score field which indicates how well the terms in the document are associated with the terms in the user profile).

As per claim 20 same as claim arguments above and Robertson teaches:

wherein the calculating a document score is determined from a relationship between the respective document and another of the documents in the server database(paragraph 65, as retrieved set of previous relevant documents are stored in the user profile and used in determining document score).

As per independent claim 26 Cameron teaches:

An apparatus for synchronizing a client having a client database with a server having a server database (paragraph 7, lines 4-8, synchronizing documents between server and client);

means for initiating a synchronization task at one of the clients, ... and identifying the server and the server database for synchronization (paragraph 12 and paragraph 42, as during synchronization server or small device (client) notifies the other of changes and update).

Cameron does not explicitly teach means for calculating for a plurality of times and a plurality of clients a document score for each document in a plurality of documents in the server database, each document score designating an importance of a respective of the documents to a respective one of the clients at one of the times; and means for

transmitting one of the documents in the server database to the client based on a respective document score for a latest time.   Robertson does teach these limitations at (paragraph 20, new documents which include documents newly received to the document filtering system and/or documents currently in the system which have been modified and paragraph 49 the new documents are scored) and (paragraph 49, lines 16-20 as profile score field which stores the score that indicates how well the terms in the document associated with the profile scoring file match the terms in the user profile and paragraph 20, lines 15-19, sending document to user) to deliver to a user , electronic documents that a user may find relevant. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Cameron with calculating a document score for each of a plurality of documents in the server database, the document score designating an importance of the document to the client and means for transmitting one of the documents in the server database to the client based on a respective document score to deliver to a user , electronic documents that a user may find relevant as described by Robertson (paragraph 1, lines 14-15).

        Cameron and Robertson do not explicitly teach the threshold value and comparison . Leung does teach this limitation (page 9 lines 25-30, storage capacity threshold) to provide efficient data access while optimizing storage resources. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Cameron and Robertson with the threshold value and comparison to provide efficient data access while optimizing storage resources as described by Leung

(Abstract).

As per claim 27 same as claim arguments above and Robertson teaches:

further comprising means for determining a threshold value, the one of the documents in the server database being transmitted to the client if the respective document score exceeds the threshold value(paragraph 61, threshold value).

Claims 8,10   are rejected under 35 U.S.C. 103(a) as being unpatentable over Cameron and Robertson and Leung as applied to claims 1,7,9 above, and further in view of US 2005/0071741 issued to Anurag Acharya et al ("Acharya").

As per claim 8 same as claim arguments above and Cameron and Robertson and Leung do not explicitly teach further comprising assigning a document score having a maximum value to the newly created document . Acharya does teach this limitation (paragraph 0043 as modifying document scores based on the age of the document which equates to a newly created document) to improve the quality of search results. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Cameron and Robertson and Leung with assigning a document score having a maximum value to the newly created document to improve the quality of search results as described by Acharya (paragraph 10).

As per claim 10 same as claim arguments above and Cameron and Robertson and Leung do not explicitly teach further comprising assigning a document score having a maximum value to the modified document . Acharya does teach this limitation (paragraph 0043 as modifying document scores based on the age of the document which equates to a newly modified document) to improve the quality of search results. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Cameron and Robertson and Leung with assigning a document score having a maximum value to the modified document to improve the quality of search results as described by Acharya (paragraph 10).

Response to Arguments

Applicant's arguments filed 6/26/2008 have been fully considered but they are not persuasive.

Applicant argues on page 8 that Leung fails to add sufficient teaching to Cameron and Robertson to suggest that a threshold value should be specified in the initiation of a synchronization task by a client, and that a document transmission from a server should then be based on a comparison to this threshold value. The Examiner disagrees given the following:

The Examiner submits that Leung does teach the specification of a threshold value as presently claimed. That is, Leung teaches an indication of a threshold size of a

data file before the file can be store on a storage device (Leung, col. 21 line 39-41). Leung further teaches that each threshold…may indicate the percentage of total capacity of the device that the user desires to allocate for storing data of the particular type (Leung, col. 9 line 34-37). Moreover, the Examiner submits that Leung teaches an indication of a threshold size of a data file before the file can be stored on a particular device 9 col. 21, line 39-41).

The Examiner submits that in these citations, Leung sufficiently teaches what Applicant defines as generic "threshold value" and the comparison of that value. In other words, the teachings of Leung are directed towards a threshold that indicates whether a file should be stored. Likewise, the present invention claims the use of a threshold value to transmit a document to a client. This point becomes apparent when Leung discloses that if the device requirements (e.g. which can be a threshold, col. 9 line 42-49) for the single device are satisfied, the single storage device is selected for storing the data file (col. 21 line 38-42).   On the other hand, if the requirements are not met (step 536) then the file is not stored on that device. Herein, a comparison is made to see if the file can be stored on the device according to a specified threshold.

In conclusion, with Leung's endeavor of data migration (i.e. data transmission) specifying when and how data is to be stored and/or migrated (Leung, col. 7 line 47-50), ascertaining a threshold to determine if a file should/can be stored teaches the claimed specification of a threshold value as is presently claimed.

The Applicant further argues (p. 8 of the reply) that there is no teaching that would lead one skilled in the art to invent such a threshold value specified during the initiation of a synchronization task at a client and then used during a step of transmitting a document in a server database to a client based on a comparison of the threshold value and a respective document store.

The Examiner disagrees and maintains that it would have been obvious to one of ordinary skill in the art for Cameron and Robertson to use Leung's threshold comparison for the efficient data access while optimization storage resources. The Examiner further submits that at least Cameron could have used such a technique when they are concerned with transmitting files to small devices such as handhelds (Cameron 0005). It is commonly known that handheld devices do not contain such a high data storage capacity and therefore, Leung's teachings would have optimized the storing of data onto those devices with the use of the disclosed threshold value comparison techniques. Similarly, Robertson could have used such a threshold comparison technique as provided by Leung with discussion of delivering data across a distributed network (e.g. Robertson, 0023).

In conclusion, the Examiner submits that in light of the new 35 U.S.C. 101 rejection given to claim 16 and its depending claims, this Office Action is hereby non-final.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT TIMBLIN whose telephone number is (571)272-5627. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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